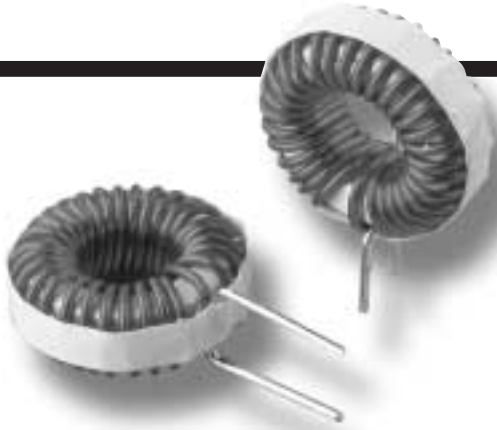




RL-1386

SWINGDUCTOR™

SELF LEADED



Swinging choke requirements can now be satisfied with the RL-1386 Series of SWINGDUCTORS™ that were primarily designed for use in applications that require a known inductance change with changing current loads as in power supplies.

Although similar in appearance to conventional toroids, the special core material allows a "controlled saturation" so that a specific inductance value is repeatable at a specific current. The core material is effective up to 1 MHz. As a result of the toroidal design the SWINGDUCTORS™ produce a closed magnetic field resulting in low EMI. All chokes are supplied with pretinned leads for easy PC board installation.

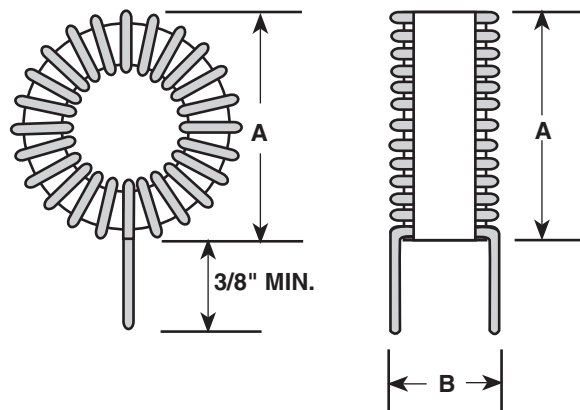
Typical Applications:

- Switching Power Supplies
- Hash Filters
- RF Filters
- Output Chokes
- EMI/RFI Filtering

Selecting the correct SWINGDUCTOR™ is simplified since a wide choice of standard devices covering an extensive range of inductance values and current ratings are available.

PART NUMBER	A MAX DIA.	B MAX. WIDTH
RL-1386-1	1.1	0.500
RL-1386-2	1.45	0.875
RL-1386-3	1.8	0.900
RL-1386-4	2.0	1.1
RL-1386-5	2.6	1.5

ALL DIMENSIONS IN INCHES



RENCO ELECTRONICS, INC.

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(321) 637-1000 • Toll Free Engineering Hot line 800-645-5828

Fax: (321) 637-1600 Web Site: www.rencousa.com E-mail: sales@rencousa.com

SINCE 1955

RL-1386-1									
Renco Part No.	L @ 0 Amps D.C. (μ H)	Max RDC. (ohms)	Suggested Rated Current (Amps)	0% L Drop (DC Amps)	10% L Drop (DC Amps)	20% L Drop (DC Amps)	30% L Drop (DC Amps)	40% L Drop (DC Amps)	50% L Drop (DC Amps)
RL-1386-1-1.1	1.1	.003	5	4.7	13.0	19.4	26.8	35.1	46.1
RL-1386-1-1.8	1.8	.004	5	3.7	10.3	15.5	21.4	28.1	36.9
RL-1386-1-2.3	2.3	.004	5	3.1	8.6	12.9	17.9	23.4	30.7
RL-1386-1-3.3	3.3	.005	5	2.6	7.4	11.7	15.3	20.1	26.4
RL-1386-1-4.7	4.7	.006	5	2.3	6.5	9.7	13.4	17.6	23.1
RL-1386-1-5.6	5.6	.006	5	2.1	5.7	8.6	11.9	15.6	20.5
RL-1386-1-6.8	6.8	.007	5	1.9	5.2	7.5	10.7	14.1	18.5
RL-1386-1-8.2	8.2	.008	5	1.7	4.7	7.1	9.7	12.8	16.8
RL-1386-1-10	10	.009	5	1.5	4.3	6.5	8.9	11.7	15.4
RL-1386-1-12	12	.010	5	1.3	3.7	5.6	7.7	10.1	13.2
RL-1386-1-15	15	.011	5	1.2	3.2	4.8	6.7	8.8	11.5
RL-1386-1-18	18	.012	5	.96	2.7	4.1	5.6	7.4	9.7
RL-1386-1-22	22	.013	5	.92	2.6	3.9	5.4	7.1	9.3
RL-1386-1-27	27	.014	5	.84	2.4	3.5	4.9	6.4	8.4
RL-1386-1-33	33	.016	5	.74	2.1	3.1	4.3	5.6	7.4
RL-1386-1-39	39	.018	5	.68	1.9	2.9	4.0	5.2	6.8
RL-1386-1-47	47	.019	5	.61	1.7	2.6	3.6	4.7	6.2
RL-1386-1-56	56	.022	5	.58	1.6	2.4	3.4	4.4	5.8
RL-1386-1-68	68	.023	5	.52	1.5	2.2	3.1	4.0	5.3
RL-1386-1-82	82	.025	5	.47	1.3	2.0	2.8	3.6	4.7
RL-1386-1-100	100	.029	5	.43	1.2	1.9	2.6	3.5	4.4
RL-1386-1-120	120	.032	5	.40	1.1	1.7	2.3	3.1	4.0
RL-1386-1-150	150	.036	5	.36	1.0	1.5	2.1	2.8	3.6
RL-1386-1-180	180	.044	5	.30	.92	1.4	1.9	2.5	3.3
RL-1386-1-220	220	.054	4.5	.30	.83	1.2	1.7	2.3	3.0
RL-1386-1-270	270	.061	4.5	.27	.79	1.4	1.6	2.1	2.7
RL-1386-1-330	330	.088	3.5	.23	.64	1.6	1.3	1.8	2.3
RL-1386-1-390	390	.096	3.5	.21	.60	.90	1.3	1.6	2.2
RL-1386-1-470	470	.110	3.5	.20	.57	.85	1.2	1.6	2.1
RL-1386-1-560	560	.172	2.0	.18	.50	.74	1.0	1.4	1.8
RL-1386-1-680	680	.198	2.0	.16	.46	.68	.95	1.3	1.7
RL-1386-1-820	820	.250	1.5	.15	.42	.64	.89	1.2	1.5
RL-1386-1-1000	1000	.286	1.5	.14	.38	.57	.79	1.1	1.4
RL-1386-1-1200	1200	.407	1.2	.12	.33	.50	.68	.90	1.2
RL-1386-1-1500	1500	.469	1.2	.11	.30	.44	.61	.81	1.1

NOTES:

1. Inductance $\pm 25\%$, measured at 1 KHz on ESI Model #252.
2. Drive level at which you test is important.
3. Leads for PC mounting tinned to within 1/16" of body.
4. Nonstandard values available on request.
5. Encapsulation available.
6. RDC measured @20°C.
7. On larger units and units wound with finer wire additional mechanical mounting is recommended.
8. Horizontal mounted units also available.
9. Saturation currents shown are for MAXIMUM drop of L indicated, i.e., if 20% drop for a 100 μ H choke is at 2 Amps, at 2 Amps the L will be $\geq 80\mu$ H.



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RL-1386-2									
Renco Part No.	L @ 0 Amps D.C. (μ H)	Max RDC. (ohms)	Suggested Rated Current (Amps)	0% L Drop (DC Amps)	10% L Drop (DC Amps)	20% L Drop (DC Amps)	30% L Drop (DC Amps)	40% L Drop (DC Amps)	50% L Drop (DC Amps)
RL-1386-2-1.2	1.2	.003	5	7.7	21.7	32.7	45.0	59.1	77.7
RL-1386-2-2.0	2.0	.004	5	8.8	15.4	24.5	33.8	44.3	58.2
RL-1386-2-3.3	3.3	.005	5	4.7	13.1	19.6	27.0	35.5	46.6
RL-1386-2-4.7	4.7	.006	5	3.9	10.9	16.4	22.5	29.5	38.8
RL-1386-2-6.8	6.8	.007	5	3.3	9.3	14.0	19.3	25.3	33.3
RL-1386-2-8.2	8.2	.008	5	2.9	8.1	12.3	16.9	22.1	29.1
RL-1386-2-10	10	.010	5	2.6	7.3	10.9	15.0	20.0	25.8
RL-1386-2-12	12	.011	5	2.3	6.6	9.8	13.5	17.7	23.3
RL-1386-2-15	15	.011	5	2.1	5.9	8.9	12.3	16.1	21.2
RL-1386-2-18	18	.012	5	1.9	5.5	8.2	11.3	14.8	18.9
RL-1386-2-22	22	.013	5	1.8	5.0	7.5	10.4	13.6	17.4
RL-1386-2-27	27	.013	5	1.6	4.4	6.5	9.0	11.8	15.5
RL-1386-2-33	33	.018	5	1.4	3.8	5.8	7.9	10.4	13.7
RL-1386-2-39	39	.019	5	1.2	3.4	5.2	7.1	9.3	12.2
RL-1386-2-47	47	.022	5	1.2	3.3	4.9	6.8	8.8	11.6
RL-1386-2-56	56	.024	5	1.0	2.8	4.3	5.9	7.7	10.1
RL-1386-2-68	68	.028	5	.93	2.6	3.9	5.1	7.0	9.3
RL-1386-2-82	82	.030	5	.83	2.3	3.5	4.8	6.3	8.3
RL-1386-2-100	100	.032	5	.75	2.1	3.2	4.4	5.7	7.5
RL-1386-2-120	120	.036	5	.70	1.9	3.0	4.1	5.3	7.0
RL-1386-2-150	150	.042	5	.64	1.8	2.7	3.7	4.9	6.4
RL-1386-2-180	180	.046	5	.57	1.5	2.4	3.3	4.3	5.7
RL-1386-2-220	220	.053	5	.51	1.5	2.2	3.0	3.9	5.1
RL-1386-2-270	270	.059	5	.48	1.3	2.0	2.8	3.6	4.8
RL-1386-2-330	330	.064	5	.43	1.2	1.8	2.5	3.3	4.3
RL-1386-2-390	390	.068	5	.39	1.1	1.7	2.3	3.0	3.9
RL-1386-2-470	470	.076	5	.36	1.0	1.5	2.1	2.7	3.6
RL-1386-2-560	560	.086	5	.32	.90	1.4	1.9	2.5	3.2
RL-1386-2-680	680	.131	4.5	.29	.81	1.2	1.7	2.2	2.9
RL-1386-2-820	820	.143	4.5	.26	.74	1.1	1.5	2.0	2.6
RL-1386-2-1000	1000	.161	4.5	.24	.67	1.0	1.4	1.8	2.4
RL-1386-2-1200	1200	.180	3.5	.21	.59	.89	1.2	1.6	2.1
RL-1386-2-1500	1500	.340	2.0	.19	.52	.78	1.1	1.4	1.9
RL-1386-2-1800	1800	.371	2.0	.17	.48	.72	.99	1.3	1.7
RL-1386-2-2200	2200	.432	2.0	.15	.43	.65	.90	1.2	1.6
RL-1386-2-2700	2700	.520	2.0	.12	.38	.58	.78	1.1	1.4



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RL-1386-3									
Renco Part No.	L @ 0 Amps D.C. (μH)	Max RDC. (ohms)	Suggested Rated Current (Amps)	0% L Drop (DC Amps)	10% L Drop (DC Amps)	20% L Drop (DC Amps)	30% L Drop (DC Amps)	40% L Drop (DC Amps)	50% L Drop (DC Amps)
RL-1386-3-1.5	1.5	.003	9	8.6	23.7	39.2	54.9	73.2	96.3
RL-1386-3-2.2	2.2	.003	9	6.4	17.7	29.4	41.1	54.9	72.2
RL-1386-3-3.3	3.3	.004	9	5.1	14.1	23.6	32.9	43.9	57.8
RL-1386-3-5.6	5.6	.004	9	4.2	11.8	19.6	27.5	36.6	48.2
RL-1386-3-6.8	6.8	.005	9	3.6	10.1	16.8	23.5	31.4	41.2
RL-1386-3-10	10	.006	9	2.8	7.8	13.1	18.3	24.4	32.1
RL-1386-3-12	12	.007	9	2.6	7.1	11.8	16.5	22.0	28.9
RL-1386-3-15	15	.007	9	2.3	6.5	9.9	14.9	19.9	26.1
RL-1386-3-18	18	.008	9	2.1	5.9	9.8	13.7	18.3	24.0
RL-1386-3-22	22	.010	9	1.9	5.5	9.0	12.6	16.8	22.1
RL-1386-3-27	27	.011	9	1.7	4.7	7.8	11.0	14.6	19.3
RL-1386-3-33	33	.012	9	1.5	4.4	7.3	10.3	13.7	18.0
RL-1386-3-39	39	.013	9	1.4	3.9	6.5	9.1	12.2	16.0
RL-1386-3-47	47	.014	9	1.3	3.6	5.9	8.2	11.0	14.4
RL-1386-3-56	56	.016	9	1.1	3.2	5.3	7.5	9.9	13.1
RL-1386-3-68	68	.017	9	.99	3.0	4.9	6.8	9.1	12.0
RL-1386-3-82	82	.019	9	.90	2.7	4.5	6.3	8.4	11.1
RL-1386-3-100	100	.022	9	.88	2.4	4.1	5.7	7.6	9.9
RL-1386-3-120	120	.024	9	.80	2.2	3.6	5.1	6.8	9.3
RL-1386-3-150	150	.026	9	.73	2.0	3.3	4.7	6.2	8.2
RL-1386-3-180	180	.029	9	.68	1.9	3.1	4.3	5.8	7.6
RL-1386-3-220	220	.032	9	.58	1.6	2.6	3.7	5.0	6.5
RL-1386-3-270	270	.035	9	.55	1.5	2.5	3.5	4.8	6.2
RL-1386-3-330	330	.040	9	.50	1.4	2.3	3.2	4.3	5.7
RL-1386-3-390	390	.054	7	.47	1.3	2.1	3.0	4.0	5.3
RL-1386-3-470	470	.061	7	.43	1.2	2.0	2.8	3.7	4.8
RL-1386-3-560	560	.068	7	.38	1.0	1.7	2.4	3.2	4.3
RL-1386-3-680	680	.090	5	.34	.93	1.6	2.2	2.9	3.8
RL-1386-3-820	820	.148	3.5	.31	.86	1.4	2.0	2.7	3.5
RL-1386-3-1000	1000	.172	3.5	.27	.75	1.2	1.7	2.3	3.0
RL-1386-3-1200	1200	.190	3.5	.25	.68	1.1	1.6	2.1	2.8
RL-1386-3-1500	1500	.210	3.5	.22	.61	1.0	1.4	1.9	2.5
RL-1386-3-1800	1800	.232	3.5	.21	.57	.94	1.3	1.8	2.3
RL-1386-3-2200	2200	.412	2.0	.18	.49	.81	1.1	1.5	2.0
RL-1386-3-2700	2700	.450	2.0	.16	.45	.76	1.1	1.4	1.9
RL-1386-3-3300	3300	.500	2.0	.15	.41	.69	.96	1.3	1.7
RL-1386-3-3900	3900	.541	2.0	.14	.38	.63	.87	1.2	1.5



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RL-1386-4									
Renco Part No.	L @ 0 Amps D.C. (μH)	Max RDC. (ohms)	Suggested Rated Current (Amps)	0% L Drop (DC Amps)	10% L Drop (DC Amps)	20% L Drop (DC Amps)	30% L Drop (DC Amps)	40% L Drop (DC Amps)	50% L Drop (DC Amps)
RL-1386-4-1.2	1.2	.002	14	11.7	33.3	50.4	69.3	90.9	119.7
RL-1386-4-2.2	2.2	.002	14	9.0	25.2	37.8	52.2	68.4	90.0
RL-1386-4-3.3	3.3	.003	14	7.2	19.8	29.7	41.4	54.0	72.0
RL-1386-4-4.7	4.7	.003	14	5.9	16.2	25.2	34.2	45.0	59.4
RL-1386-4-6.8	6.8	.004	14	5.1	14.4	21.6	29.7	38.7	51.3
RL-1386-4-8.2	8.2	.004	14	4.5	12.6	18.9	26.1	34.2	45.0
RL-1386-4-10	10	.005	14	3.0	10.8	16.2	22.5	29.7	39.6
RL-1386-4-12	12	.005	14	3.6	9.9	14.4	20.7	27.0	36.0
RL-1386-4-15	15	.005	14	3.2	9.0	13.5	18.9	24.3	32.4
RL-1386-4-18	18	.006	14	3.0	8.4	12.6	17.2	22.5	29.7
RL-1386-4-22	22	.006	14	2.8	7.7	11.7	15.3	20.7	27.0
RL-1386-4-27	27	.007	14	2.3	6.8	9.9	13.5	18.0	23.4
RL-1386-4-33	33	.008	14	2.1	5.9	8.8	11.7	15.3	20.7
RL-1386-4-39	39	.010	14	1.9	5.2	7.9	10.8	14.4	18.9
RL-1386-4-47	47	.011	14	1.7	4.8	7.2	9.9	12.6	17.1
RL-1386-4-56	56	.012	14	1.5	4.3	6.6	9.0	11.7	15.3
RL-1386-4-68	68	.013	14	1.4	4.1	6.0	8.3	10.8	14.4
RL-1386-4-82	82	.014	14	1.3	3.6	5.4	7.4	9.0	12.6
RL-1386-4-100	100	.014	14	1.2	3.2	4.9	6.7	8.8	10.8
RL-1386-4-120	120	.017	14	1.1	2.9	4.4	6.1	8.0	9.9
RL-1386-4-150	150	.018	14	.90	2.6	4.0	5.5	7.2	9.0
RL-1386-4-180	180	.022	14	.86	2.3	3.6	5.0	6.5	8.6
RL-1386-4-220	220	.024	14	.78	2.2	3.2	4.5	5.9	7.7
RL-1386-4-270	270	.026	14	.71	1.9	2.9	4.1	5.3	7.0
RL-1386-4-330	330	.029	14	.63	1.7	2.6	3.6	4.8	6.3
RL-1386-4-390	390	.034	14	.58	1.6	2.4	3.3	4.4	5.8
RL-1386-4-470	470	.036	14	.54	1.4	2.3	3.1	4.1	5.3
RL-1386-4-560	560	.042	14	.49	1.4	2.1	2.8	3.7	4.9
RL-1386-4-680	680	.056	9	.44	1.2	1.8	2.5	3.3	4.3
RL-1386-4-820	820	.064	9	.40	1.1	1.6	2.3	3.0	4.0
RL-1386-4-1000	1000	.090	9	.36	1.0	1.5	2.1	2.7	3.6
RL-1386-4-1200	1200	.115	7	.33	.90	1.4	1.9	2.5	3.3
RL-1386-4-1500	1500	.123	7	.29	.81	1.2	1.6	2.2	2.7
RL-1386-4-1800	1800	.149	7	.26	.75	1.1	1.5	2.0	2.6
RL-1386-4-2200	2200	.164	7	.24	.68	.99	1.4	1.8	2.3
RL-1386-4-2700	2700	.229	5	.22	.61	.90	1.3	1.6	2.2
RL-1386-4-3300	3300	.252	5	.20	.56	.84	1.1	1.4	2.0
RL-1386-4-3900	3900	.318	4.5	.18	.51	.76	.99	1.4	1.8
RL-1386-4-4700	4700	.336	4.5	.16	.46	.68	.90	1.2	1.6
RL-1386-4-5600	5600	.348	4.5	.15	.42	.63	.87	1.1	1.4



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RL-1386-5									
Renco Part No.	L @ 0 Amps D.C. (μ H)	Max RDC. (ohms)	Suggested Rated Current (Amps)	0% L Drop (DC Amps)	10% L Drop (DC Amps)	20% L Drop (DC Amps)	30% L Drop (DC Amps)	40% L Drop (DC Amps)	50% L Drop (DC Amps)
RL-1386-5-1.0	1.0	.001	22	19.9	55.8	83.7	115.2	151.2	199.4
RL-1386-5-2.2	2.2	.002	22	13.2	37.2	55.8	77.0	100.8	132.8
RL-1386-5-3.9	3.9	.002	22	9.9	27.9	41.4	57.8	75.6	99.6
RL-1386-5-5.6	5.6	.002	22	7.9	22.3	33.3	46.3	60.3	79.7
RL-1386-5-10	10	.003	22	6.6	18.5	27.9	38.5	50.4	66.4
RL-1386-5-12	12	.003	22	5.7	15.9	23.4	33.0	43.2	56.9
RL-1386-5-15	15	.003	22	5.0	14.0	20.7	28.9	37.8	49.8
RL-1386-5-18	18	.004	22	4.4	12.3	18.3	25.7	33.3	44.3
RL-1386-5-22	22	.004	22	4.0	11.2	16.2	23.1	29.7	39.9
RL-1386-5-27	27	.004	22	3.2	9.3	13.5	19.3	25.2	33.2
RL-1386-5-33	33	.005	22	3.1	8.6	12.6	17.7	22.5	30.6
RL-1386-5-39	39	.005	22	2.8	7.9	11.7	16.5	21.6	28.4
RL-1386-5-47	47	.006	22	2.4	6.9	9.9	14.4	18.9	24.8
RL-1386-5-56	56	.007	22	2.3	6.5	9.0	13.6	17.1	23.4
RL-1386-5-68	68	.007	22	2.1	5.9	8.1	12.2	15.3	21.0
RL-1386-5-82	82	.008	22	11.9	5.3	7.2	11.0	14.4	18.9
RL-1386-5-100	100	.010	22	1.6	4.6	6.3	9.6	12.6	16.6
RL-1386-5-120	120	.011	22	1.5	4.2	6.3	8.8	10.8	15.3
RL-1386-5-150	150	.012	22	1.4	4.0	5.4	8.2	10.8	14.2
RL-1386-5-180	180	.014	22	1.3	3.6	5.4	7.4	9.0	12.8
RL-1386-5-220	220	.016	22	1.2	3.2	4.5	6.8	8.1	11.7
RL-1386-5-270	270	.017	22	1.0	2.8	3.6	5.9	7.2	10.2
RL-1386-5-330	330	.019	22	.90	2.6	3.6	5.5	7.2	9.5
RL-1386-5-390	390	.023	22	.81	2.3	3.6	5.0	6.3	8.6
RL-1386-5-470	470	.039	18	.80	2.2	3.3	4.6	6.0	7.7
RL-1386-5-560	560	.040	18	.69	1.9	2.9	4.0	5.1	6.8
RL-1386-5-680	680	.042	11	.63	1.8	2.7	3.6	4.8	6.1
RL-1386-5-820	820	.048	11	.58	1.6	2.4	3.3	4.3	5.8
RL-1386-5-1000	1000	.057	11	.51	1.4	2.1	2.9	3.9	5.0
RL-1386-5-1200	1200	.091	7	.47	1.3	1.9	2.7	3.5	4.7
RL-1386-5-1500	1500	.103	7	.42	1.2	1.7	2.4	3.2	4.2
RL-1386-5-1800	1800	.113	7	.39	1.1	1.6	2.2	2.9	3.9
RL-1386-5-2200	2200	.130	7	.34	1.0	1.4	2.0	2.5	3.4
RL-1386-5-2700	2700	.145	7	.31	.87	1.3	1.8	2.3	3.1
RL-1386-5-3300	3300	.193	5	.28	.79	1.2	1.6	2.2	2.8
RL-1386-5-3900	3900	.210	5	.26	.79	1.1	1.4	1.9	2.5
RL-1386-5-4700	4700	.237	5	.23	.65	.40	1.4	1.7	2.3
RL-1386-5-5600	5600	.315	5	.21	.59	.90	1.2	1.6	2.1

Tests for SWINGDUCTOR™

0 to 200 μ H
 200 μ H to 2 mH
 2 mH to 20 mH
 20 mH to 200 mH
 200 mH to 20H
 20 H to 200H

100mAAC at 1 KC
 10mA AC at 1 KC
 1mA AC at 1 KC
 100 μ A AC at 1 KC
 10 μ AAC at 1 KC
 1 μ AAC at 1 KC

TEST AT ZERO DC BIAS



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